AMENDMENTS TO THE CLAIMS

Kindly amend the claims by changing Claims 1, 3, 10, 11, 12, 13, 17, 38, 39, 40, 46 and 47; and add new Claims 77-86; all without prejudice to or disclaimer of any subject matter. A complete listing of the claims as they should appear after entry of the amendment, including markings to show changes made to the changed claims, begins on the next page.

COMPLETE LISTING OF CLAIMS SHOWING CURRENT CHANGES MADE

1. (Currently Amended) A method for making a particulate product containing insulin, the method comprising:

contacting a feed solution containing insulin with a compressed anti-solvent fluid to precipitate particles containing insulin, the feed solution including the insulin in a cosolvent system, the cosolvent system comprising a first organic solvent and a second organic solvent that are mutually soluble, the first organic solvent and the second organic solvent not being the same; and

separating the particles from the first organic solvent, the second organic solvent and the anti-solvent fluid.

2. (Previously Amended) The method of claim 1, wherein insulin is at least an order of magnitude more soluble in the first organic solvent than in the second organic solvent.

3. (Currently Amended) The method of claim 1, wherein the first organic solvent and the second organic solvent are present in the cosolvent system ~~solution~~ at a volume ratio of the second organic solvent to the first organic solvent of larger than 30:70.

4. (Previously Amended) The method of claim 1, wherein the first organic solvent and the second organic solvent are present in the cosolvent system at a volume ratio of the second organic solvent to the first organic solvent of from 50:50 to 90:10.

5. (Previously Amended) The method of claim 1, wherein the concentration of insulin in the cosolvent system is smaller than 3 mg of insulin per milliliter of the feed solution.

6. (Previously Amended) The method of claim 1, wherein the concentration of insulin in the cosolvent system is in a range of from 0.3 to 3 mg of insulin per milliliter of the solution.

7. (Previously Amended) The method of claim 1, wherein the first organic solvent is selected from the group consisting of dimethyl sulfoxide and dimethyl formamide.

8. (Original) The method of claim 7, wherein the second organic solvent is an alcohol.

9. (Original) The method of claim 7, wherein the second organic solvent is a C1-C5 alkanol.

10. (Currently Amended) The method of claim 1, wherein the compressed anti-solvent fluid, during the contacting, is at a reduced pressure of larger than 0.8 and a reduced

temperature of larger than 0.95, the reduced pressure being a ratio of pressure expressed in atmospheres of the compressed anti-solvent fluid during the contacting to the critical pressure expressed in atmospheres of the compressed anti-solvent fluid, and the reduced temperature being a ratio of temperature expressed in K of the compressed anti-solvent fluid during the contacting to the critical temperature expressed in K of the compressed anti-solvent fluid.

11. (Currently Amended) The method of claim 10, wherein the compressed anti-solvent fluid, during the contacting, is at a reduced pressure of larger than 0.9.

12. (Currently Amended) The method of claim 10, wherein the compressed anti-solvent fluid, during the contacting, is in a supercritical state.

13. (Currently Amended) The method of claim 10, wherein the compressed anti-solvent fluid comprises compressed carbon dioxide.

14. (Previously Amended) The method of claim 1, wherein the feed solution is free of amphiphilic materials that improve solubility of the insulin in the feed solution through hydrophobic ion pairing with the insulin.

15. (Previously Amended) The method of claim 1, wherein, during the contacting step, the solution is introduced into the compressed anti-solvent fluid through an opening having a cross-sectional area available for flow that is larger than 1 square millimeter.

16. (Previously Amended) The method of claim 15, wherein the solution, when introduced into the compressed anti-solvent fluid has a direction of flow that is at an angle of from 45° to 180° relative to the direction of flow of the compressed anti-solvent fluid.

17. (Currently Amended) The method of claim 1, wherein the cosolvent system comprises up to ~~includes water, if at all, in an amount of smaller than~~ 5 weight percent water.

18. (Previously Amended) The method of Claim 1, wherein the cosolvent system is free of water.

19. (Previously Amended) The method of claim 1, wherein the feed solution comprises colloidal particles of the insulin dispersed in the cosolvent system.

20. (Previously Amended) The method of claim 1, wherein the feed solution includes a biocompatible polymer and the particles are multi-component particles including the insulin and the biocompatible polymer.

21. (Original) The method of claim 20, wherein the insulin is more soluble in the first organic solvent than is the biocompatible polymer, and the biocompatible polymer is more soluble in the second organic solvent than the insulin.

22. (Original) The method of claim 20, wherein the biocompatible polymer is hydrophobic, the first organic solvent being a polar solvent for the insulin and the second organic solvent being a nonpolar solvent for the biocompatible polymer.

23. (Previously Amended) The method of claim 20, wherein the first organic solvent is miscible with water and the second organic solvent is immiscible with water.

24. (Previously Amended) The method of claim 20, wherein the second organic solvent is selected from the group consisting of methylene chloride, formaldehyde, dioxolane, chloroform, benzene, ethyl ether, toluene, xylene, 1,3-dioxane and tetrahydrofuran.

25. (Original) The method of claim 24, wherein the first organic solvent comprises an alcohol.

26. (Original) The method of claim 25, wherein the first organic solvent comprises a C_1-C_5 alkanol.

27. (Previously Amended) The method of claim 26, wherein the first organic solvent is selected from the group consisting of methanol, ethanol and isopropanol.

28. (Original) The method of claim 26, wherein the second organic solvent comprises methylene chloride.

29. (Original) The method of claim 26, wherein the feed solution further comprises an acid dissolved in the cosolvent system.

30. (Previously Amended) The method of claim 29, wherein the acid comprises an inorganic acid.

31. (Original) The method of claim 29, wherein the acid comprises hydrochloric acid.

32. (Original) The method of claim 20, wherein the method comprises, prior to the contacting step, preparing the feed solution, comprising mixing a first solution having the insulin dissolved therein with a second solution having the biocompatible polymer dissolved therein, the first solution including the first organic solvent and the second solution including the second organic solvent.

33. (Original) The method of claim 32, wherein during the mixing step, the second solution is added to the first solution.

34. (Original) The method of claim 32, wherein the first solution comprises an acid to increase the solubility of the insulin in the first solution.

35. (Previously Amended) The method of claim 34, wherein the second solution is prepared by dissolving the acid in the second organic solvent and then dissolving the insulin in the second organic solvent.

36. (Previously Amended) The method of claim 30, wherein the weight ratio of the insulin to the polymer in the feed solution is larger than 5:95.

37. (Previously Amended) The method of claim 20, wherein the weight ratio of the insulin to the polymer in the feed solution is in a range of from 5:95 to 50:50.

38. (Currently Amended) The method of claim 20, wherein both of the first organic solvent and the second organic solvent are soluble in the compressed anti-solvent fluid, and during the contacting both of the first organic solvent and the second organic solvent are extracted into the compressed anti-solvent fluid.

39. (Currently Amended) The method of claim 20, wherein the compressed anti-solvent fluid, during the contacting step, is at a reduced pressure of larger than 0.5 relative to the critical pressure of the anti-solvent fluid, the reduced pressure being a ratio of pressure expressed in atmospheres of the compressed anti-solvent fluid during the contacting to the critical pressure expressed in atmospheres of the compressed anti-solvent fluid.

40. (Currently Amended) The method of claim 39, wherein the compressed anti-solvent fluid, during the contacting step, is at a reduced temperature of larger than 0.95 relative to the critical temperature of the anti-solvent fluid, the reduced temperature being a ratio of temperature expressed in K of the compressed anti-solvent fluid during the contacting to the critical temperature expressed in K of the compressed anti-solvent fluid.

41. (Previously Amended) The method of claim 40, wherein the compressed anti-solvent fluid, during the contacting step, is at a reduced pressure of larger than 0.8 relative to the critical pressure of the anti-solvent fluid.

42. (Original) The method of claim 20, wherein the compressed anti-solvent fluid, during the contacting step, is in a supercritical state.

43. (Original) The method of claim 20, wherein the compressed anti-solvent fluid comprises compressed carbon dioxide.

44. (Original) The method of claim 20, wherein the compressed anti-solvent fluid consists essentially of only compressed carbon dioxide.

45. (Previously Amended) The method of claim 20, wherein during the contacting step, the feed solution is introduced into a flowing stream of the compressed anti-solvent fluid, the direction of flow of the feed solution, when introduced into the flowing stream of the compressed anti-solvent fluid, is at an angle of from 45° to 180° relative to the direction of flow of the compressed anti-solvent fluid.

46. (Currently Amended) The method of claim 20, wherein the multi-component particles have a degree of encapsulation of the insulin by the polymer of greater than 50 percent, on a weight basis.

47. (Currently Amended) The method of claim 20, wherein the multi-component particles have a degree of encapsulation of the insulin by the polymer of greater than 70 percent, on a weight basis.

48. (Previously Amended) The method of claim 20, wherein the biocompatible polymer includes a poly(lactic acid).

Claims 49-76 (cancelled)

77. (New) The method of claim 1, wherein the contacting comprises extracting the first organic solvent and the second organic solvent into the anti-solvent fluid.

78. (New) The method of claim 77, wherein the first organic solvent and the second organic solvent are present in the cosolvent system at a volume ratio of the second organic solvent to the first organic solvent of from 10:90 to 99:1.

79. (New) The method of claim 77, wherein the first organic solvent and the second organic solvent are present in the cosolvent system at a volume ratio of the second organic solvent to the first organic solvent of from 10:90 to 90:10.

80. (New) The method of claim 79, wherein the concentration of insulin in the cosolvent system is smaller than 3 mg of insulin per milliliter of the feed solution.

81. (New) The method of claim 79, wherein the concentration of insulin in the cosolvent system is in a range of from 0.3 to 3 mg of insulin per milliliter of the solution.

82. (New) The method of claim 80, wherein the compressed anti-solvent fluid, during the contacting, is at a reduced pressure of larger than 0.9 and a reduced temperature of larger than 0.95, the reduced pressure being a ratio of pressure expressed in atmospheres of the compressed anti-solvent fluid during the contacting to the critical pressure expressed in atmospheres of the compressed anti-solvent fluid, and the reduced temperature being a ratio of temperature expressed in K of the compressed anti-solvent fluid during the contacting to the critical temperature expressed in K of the compressed anti-solvent fluid.

83. (New) The method of claim 82, wherein the compressed anti-solvent fluid, during the contacting step, is in a supercritical state.

84. (New) The method of claim 82, wherein, in the feed solution, the insulin is dissolved in the cosolvent system.

85. (New) The method of claim 84, wherein the feed solution includes a biocompatible polymer and the particles are multi-component particles including the insulin and the biocompatible polymer.

86. (New) The method of claim 85, wherein, in the feed solution, both the insulin and the biocompatible polymer are dissolved in the cosolvent system.